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GROUP 3600

FOR: Method for Using Software Products that are Offered Via a Network

37 CFR 1.193(b)(2)(ii) SUPPLEMENTAL APPEAL BRIEF

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ALEXANDRIA, VA 22313-1450

Sir:

This is a 37 CFR 1.193(b)(2)(ii) supplemental appeal in reply to the non-final office action mailed March 24, 2004.

The applicant hereby requests reinstatement of the appeal filed December 31, 2003. A Notice of Appeal was timely filed December 23, 2003. The claims on appeal are set forth in the Appendix.

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I. **37 CFR 1.192(a)**

This supplemental appeal brief is filed in triplicate and sets forth the authorities and arguments on which the appellant will rely to maintain the appeal.

II. **37 CFR 1.192(b)**

The filing is timely. Accordingly, this subsection is not relevant.

III. **37 CFR 1.192(c)**

A. **37 CFR 1.192(c)(1) Real party in interest**

The real party in interest is SIEMENS Aktiengesellschaft, a German corporation.

B. **37 CFR 1.192(c)(2) Related appeals and interferences**

There are no related pending appeals, pending interferences, or requests for interferences known to the appellant's representative or the appellant's assignee.

C. **37 CFR 1.192(c)(3) Status of claims**

Claims 1 and 3-15 are pending, rejected, and under appeal.

D. **37 CFR 1.192(c)(4) Status of amendments**

All amendments are entered.

E. **37 CFR 1.192(c)(5) Summary of the invention**

The invention of claim 1 is a method for using software products that are offered via a network, comprising: inquiring about a software product from an offer server by a user via a terminal device (page 7 lines 11-15); downloading said software product from said offer server via said network onto said terminal device in response to said inquiring by said user (page 7 lines 14-15; page 12 lines 16-23); activating a software component of said software product (page 7 lines 16-19; page 12 line 28 to page 13 line 7); starting a communication by way of said software component with a usage processing server regarding a usage of said software product in response to a call of said software product in said terminal device of said user, wherein said usage processing server is operated by a network provider (page 7 lines 16-19; page 13 lines 8-9); providing, by said software component in a framework of said communication, data to said usage processing server; (page 7 lines 23-26; page 9 lines 5-15) and checking said data, by said usage processing server (page 7 line 27 to page 8 line 8; page 13 lines 9-12), and then making a determination selected from a group consisting of: whether usage of said software product is

approved with respect to said inquiring user (page 8 lines 9-14), and whether charging operations are carried out on user accounts and provider of software product accounts (page 8 lines 15-22; page 13 lines 13-15; page 12 line 17 to page 14 line 9). Claim 3 recites the method of claim 1, further comprising operating said offer server by a network provider (page 7 lines 4-10). Claim 4 recites the method of claim 1, further comprising using a web server for a server selected from the group consisting of said offer server and said usage processing server (page 7 lines 4-10).

The invention of claim 5 is a usage processing server comprising: a usage processing module for processing a software product downloaded from a network (page 7 lines 4-10); wherein said usage processing server is operated by a network provider (page 7 lines 16-19; page 13 lines 8-9) and wherein said usage processing server is contacted by said software product after said software product has been downloaded into a terminal device of a user and has been activated (page 7 lines 16-19; page 12 line 28 to page 13 line 7); and wherein usage processing data required to perform usage processing are delivered to said usage processing server (page 7 lines 23-26; page 9 lines 5-15). Claim 6 recites a usage processing server according to claim 5, further comprising: a data store in which a software product identification of said software product and type of usage processing data that prescribe a type of usage processing of said software product are stored by said usage processing module, and wherein said usage processing module registers said software product (page 7 line 27 to page 8 line 7). Claim 7 recites a usage processing server according to claim 5, wherein: said usage processing data required comprises a software product identification of said software product and a user identification (page 7 line 27 to page 8 line 7). Claim 8 recites a usage processing server according to claim 5, wherein: said usage processing comprising performing an access control (page 8 lines 9-14). Claim 9 recites a usage processing server according to claim 5, wherein: said usage processing comprises performing a usage charging of said software product on user accounts and provider accounts (page 9 lines 15-22). Claim 10 recites a usage processing server according to claim 5, wherein: said usage processing module keeps statistics about usage contacts that have taken place and about results of a processing of said usage contacts (page 9 lines 23-25).

The invention of claim 11 is a software product, comprising: a software component that is activated when called by said software product (page 7 lines 16-19; page 12 line 28 to page 13

line 7) and that subsequently starts communicating with a usage process server and delivers usage processing data required for performing usage processing to said usage processing server in the framework of said communication, wherein said usage processing server is operated by a network provider (page 7 lines 23-26; page 9 lines 5-15); wherein said software product can be downloaded into a terminal device by a user via a network in response to an inquiry from said user (page 7 lines 11-15). Claim 12 recites a software product according to claim 11, wherein said usage processing data comprises: software product provider data; software product identification; and wherein said usage processing data is dynamically determined user data (page 7 line 27 to page 8 line 8). Claim 13 recites a software product according to claim 12, wherein said software component interacts with said user to produce said dynamically determined user data (page 9 lines 11-12).

The invention of claim 14 is a method for the generation of a software product that is offered via a network, comprising: installing a software component in source code of said software product of a software manufacturer by using a software development kit provided by a usage processing provider (page 7 lines 14-15; page 12 lines 16-23); activating said software component when called by said software product (page 7 lines 16-19; page 12 line 28 to page 13 line 7); starting a communication by said software component with a usage processing server after said activating said software component, wherein said usage processing server is operated by a network provider (page 7 lines 16-19; page 13 lines 8-9); sending, by said software component, usage processing data that are required for performing usage processing to said usage processing server in the framework of said communication (page 7 lines 23-26; page 9 lines 5-15).

The invention of claim 15 is a method for using software products that are offered via a network, comprising: inquiring about a software product from an offer server by a user via a terminal device (page 7 lines 11-15); downloading said software product from said offer server via said network onto said terminal device in response to said inquiring by said user (page 7 lines 14-15; page 12 lines 16-23); activating a software component of said software product (page 7 lines 16-19; page 12 line 28 to page 13 line 7); starting a communication by way of said software component with a usage processing server regarding a usage of said software product in response

to a call of said software product in said terminal device of said user (page 7 lines 16-19; page 13 lines 8-9); providing, by said software component in a framework of said communication, data to said usage processing server; (page 7 lines 23-26; page 9 lines 5-15) and checking said data, by said usage processing server (page 7 line 27 to page 8 line 8; page 13 lines 9-12), and then making a determination selected from a group consisting of: whether usage of said software product is approved with respect to said inquiring user (page 8 lines 9-14), and whether charging operations are carried out on user accounts and provider of software product accounts (page 8 lines 15-22; page 13 lines 13-15; page 12 line 17 to page 14 line 9).

F. 37 CFR 1.192(c)(6) Issues

Whether the rejection of claim 11 under 35 USC 101 as being directed to non-statutory subject matter should be reversed.

Whether the rejection of claims 5-14 under 35 USC 102(e) as being anticipated by Clark (U.S. PG Pub. No. 2001/0011254) (“Clark”) should be reversed.

Whether the rejection of claims 1, 3, 4, and 15 under 35 USC 103(a) as being unpatentable over Clark (U.S. PG Pub. No. 2001/0011254) (“Clark”) in view of U.S. patent 5,925,127 to Ahmad et al. (“Ahmad”) should be reversed.

G. 37 CFR 1.192(c)(7) Grouping of claims

Group 1 consists of claims 5, 6-8, and 14. Group 2 consists of claim 3. Group 3 consists of claim 4. Group 4 consists of claim 9. Group 5 consists of claim 10. Group 6 consists of claims 12 and 13. Group 7 consists of claim 15. Group 8 consists of claim 1. Group 9 consists of claim 11.

H. 37 CFR 1.192(c)(8) Argument

1. The Rejections Under 102(e) of Independent Claim 5 - Group 1

a. The Examiner's Argument

The examiner argues that:

As per claim 5, Clark teaches usage processing server comprising a usage processing module for processing a software product downloaded from a network, and wherein usage processing data required to perform usage processing are delivered to the usage processing server wherein the usage processing server is

contacted by the software product after the software product has been downloaded into a terminal device of a user and has been activated, and wherein the usage processing data required to perform usage processing are delivered to the processing server (see paragraphs 0035, 0308, 0316, 0325). [Office action mailed March 24, 2004 at pages 3-4 item 6.]

b. The Citations From Clark Relied Upon By the Examiner

In rejecting claim 5, the examiner relies upon the following passage from Clark at paragraph 0305, which states that:

[0305] From FIG. 1, the method of the instant invention can be seen. The method begins with a Software Vendor 3 who is in possession of Original Software 9 that the Software Vendor 3 wishes to sell to a Software User 2. The Original Software 9 is in fully compiled, executable form. The Software Vendor 3 causes the Software Profiler 10 to operate on the Original Software 9. The Software Profiler 10 acts to remove certain selected executable instructions from the Original Software 9, creating the Software Vendor's 3 copy of the Modified Software 7. The Software Vendor 3 then transfers, or communicates 13, the removed executable instructions from the Original Software 9 to the License Server 4. The License Server 4 then creates a series of Keys 11 and communicates 14 the Keys 11 to the Software Vendor 3. The Software Vendor 3 then sells and communicates 15 (by any transfer means, including without limitation on disk, by internet download, on CD-ROM, or otherwise) the Modified Software 7 to the Software User 2. The Software Vendor 3 also communicates 16 (again, by any transfer means) to the Software User 2 the User Key 5 (User Key 5 is a single one of the Keys 11) and the Trap Software 6. All three objects, the Modified Software 7, the User Key 5 and the Trap Software 6 must be installed on the Software User's 2 computer for the method of the instant invention to work. After installation of the three objects on the Software User's 2 computer, communication 17 between the Software User 2 and the License Server 4 permits the License Server 4 to execute

the removed executable instructions from the Original Software 9 and permits the Modified Software 7 to run/execute as expected by the Software User 2, provided that such communication 17 is over a link networking the License Server 4 and the Software User's 2 computer. [Clark at paragraph 305.]

The examiner further relies upon the following passage from Clark at paragraph 0308, which states that:

[0308] FIG. 3 depicts a block diagrammatic overview of the communication between the License Server 4 and the Software Vendor 3 during practice of the method of the preferred embodiment of the instant invention. The Software Vendor 3 begins the process by executing the Software Profiler 10 and supplying the Original Software 9. Software Vendor's 3 software object 55 begins execution of the Original Software 9 in a routine fashion. Software object 55 communicates 56 the fact that the Original Software 9 has begun execution to software object 57. Software object 57 examines the execution patterns of the Original Software 9. Software object 57 communicates 67 selected code sequences which are candidates for removal to software object 59 together with the fact of the termination of the execution of the Original Software 9 when the Original Software 9 terminates execution. Software object 59 makes the determination of which instructions (code sequences) to remove from the Original Software 9 for execution on the License Server 4. When software object 59 has determined which instructions to remove from the Original Software 9, software object 59 communicates 60 these selected instructions to software object 61 which communicates 13 the selected instructions to the License Server's 4 software object 46 and removes the instructions from the Original Software 9 creating Modified Software 7. The Modified Software 7 is then (normally at time of Software User's 2 purchase of the software) communicated 15 to Software User 2. Software object 61 acts to communicate 13 the instructions removed from the Original Software 9 to the License Server's 4 software object 46 where the

instructions are stored for further use. At any point after the instructions removed from the Original Software 9 have been communicated 13 to the License Server 4, the Software Vendor 3 may decide to purchase Keys 11 from the License Agent 1. The process of the Software Vendor 3 purchasing Keys 11 from the License Agent 1 begins in software object 62 which communicates 53 the desire to purchase Keys 11 from the Software Vendor 3 to the License Server's 4 software object 47. Software object 47 generates unique Keys 11 in a number responsive to the request of the Software Vendor 3. These generated Keys 11 are communicated 50 by software object 47 to software object 48 which acts to associate the Keys 11 with the removed instructions obtained from software object 61 and stored in software object 46. [Clark at paragraph 308.]

In rejecting claim 5, the examiner further relies upon Clark at paragraph 0316, which states that:

[0316] The final stage of a program's execution, shutdown, is where the program frees up the resources it has allocated in the previous stages and quits. Resources that might have been allocated include files, windows, and memory. This stage of execution is generally not important to a user because by the time it occurs, all the useful work has been accomplished. If this stage does not execute at all the user will have already have used the software package to the full extent that the user needed. In most modern operating systems, resources are automatically freed by the system when a program quits, so this stage can often be skipped without adverse effects. Removing instructions from this execution stage would produce no enhanced security for the program and if all removed instructions are selected from this execution stage, no security for the program is provided. [Clark at paragraph 316.]

In rejecting claim 5, the examiner also relies upon Clark at paragraph 0325, which states that:

[0325] The instruction sequence 298 emulated, as described in the preceding paragraph, is communicated 140 from software object 126 to software object 128. Software object 128 then makes a determination as to whether the execution of the Original Software 9 has completed, i.e. whether the end of the program has been reached, and communicates 142 a "no" determination to software object 127 or communicates 143 a "yes" determination to software object 54. Receipt of a "no" determination by software object 127 from software object 128 causes software object 127 to change the instruction pointer to the end of the instruction sequence 298 just emulated and to continue operation of the Original Software 9. Receipt of a "yes" determination by software object 54 from software object 128 causes software object 54 to save the inputs and outputs for the entire execution of the Original Software 9 as recorded by software objects 125 and 126. Software object 54, then determines if this was the first or second execution of the Original Software 9. If this was the first execution, software object 54 communicates 129 this fact to software object 55 which acts to begin the profiling process again. If this was the second execution of the Original Software 9, then software object 54 communicates 67 this fact to software object 59. Software object 59 acts to determine which instruction sequences 298 are eligible for removal and communicates 60 such instruction sequences 298 to software object 61. Software object 61, upon receipt of communication 60 from software object 59, acts to select N instruction sequences 298 sorted by fitness (discussed below), remove them from the Original Software 9 (creating Modified Software 7), and send/communicate 13 the removed instruction sequences 298 to the License Server 4. Detail of the operation of software object 61 is depicted in FIG. 9. The number N can be chosen to reflect the level of security desired. The fitness of an instruction sequence 298 is determined by matching the inputs and outputs recorded by software objects 125 and 126 from both execution #1 and execution #2 of the Original Software 9. The fitness (or security) of an instruction sequence 298 is equal to the number of input matches with corresponding output differences

plus the number of input differences. To further explain this, suppose "A" is an instruction sequence 298 which was executed 50 times during execution #1, and 100 times during execution #2. For each input from execution #1 that matches the input in execution #2, the output is tested for a match. If 49 of the executions match inputs, the outputs of those 49 executions are tested to see if they produced the same result. If 40 of those 49 executions resulted in the same output, then a starting fitness of 9 is used (49-40). Next, the inputs to the instruction sequence 298 "A" (from execution #1 and #2) are tested for non-matches. Assuming that redundancies are removed when an instruction sequence 298 has the same input and output more than once, this would make 51 mismatches (100-49). The total fitness for the instruction sequence 298 "A" would be 60 (9+51). [Clark at paragraph 325.]

c. The Recitation of Claim 5

5. A usage processing server comprising:

a usage processing module for processing a software product downloaded from a network;

wherein said *usage processing server is operated by a network provider* and wherein said usage processing server is contacted by said software product after said software product has been downloaded into a terminal device of a user and has been activated; and

wherein usage processing *data required to perform usage processing* are delivered to said usage processing server. [Emphasis added.]

d. The Applicant's Disclosure Supporting Claim 5

i. The Applicant's Definition of "Network Provider"

The application's definition of "network provider" is clear from the following passage in the specification of this application:

The network operator (or "*network provider*") operates and administers a

network that primarily provides a "bit-transport" functionality . The network operator provides network connectivity for the web servers of the provider of software and contents or he may assume this function vicariously by providing a web server for the provider ("web hosting") . The network operator also *provides network connectivity for the end user*, normally as dial-in via a modem or ISDN, and thus normally has an *established and long term business relationship with the end user*: He sends the end user invoices about received network connectivity performances on a regular basis and knows his financial actions. [Specification at page 1 lines 15-23; emphasis added.]

ii. **The Applicant's Definition of "Usage Processing"**

The application's definition of "usage processing" is clear from the following passage in the specification of this application:

According to the present invention, a service provider (e.g., the network operator) assumes the *usage processing*, (e.g., "*charging and/or access control*") for the usage of software and contents. The network operator offers this as a service for the provider of software and contents, when the provider wishes to "outsource" these tasks in order to be able to concentrate on the preparation of software and contents. The provider of software and contents can also avoid the *charging of very small amounts*, which may not be economical for him, via "outsourcing".

Providing *usage processing*, such as *charging and/or access control*, is particularly advantageous for the network operator since the end user is already connected to the network of the network operator for purposes of the network connectivity, and therefore is in a *long term business relationship* with the network operator. [Specification at page 4 lines 1-13; emphasis added.]

The application's definition of "usage processing" is clear from the following passage in the specification of this application:

Step 3 : When someone *calls the software* and contents, the service module, which is introduced via the software development kit for purposes of controlling the access and charging, *contacts the corresponding server* of the network operator via the network; *this takes place immediately after the start of the software and contents* . This contact between the service module and server via the network requires an always-on network connection or at least requires a sufficiently fast dial-up-on-demand method at the end user side . For purposes of controlling the access and charging, *data, such as cryptographic identification character (a one-to-one corresponding identification number or valid charging model) of the software and contents, user data (a user identification character, password, or account number)*, are thereby transferred to the network operator.

Step 4 : The network operator checks the data received by the end user regarding correctness, topicality and compatibility of the profile that is preset by the customer . When the end user inquires about the usage of specific software and contents, the following exemplary information can be co-considered on the server of the network operator : the cryptographic identification character and version number of the software and contents, the type of the software and contents to be used with respect to a *preset user profile (such as age restriction, restriction with respect to specific contents, etc.) of the end user, and the creditworthiness and account balance of the end user* . Such a finely-adjusted checking could not be performed in a secure manner on the device of the end user.

At the end of the check, the server of the network operator, via the network connection, reports back to the corresponding access control- and charging model on the side of the end user whether the end user is allowed to use the software and contents : If so, the software and contents continues with its *normal functioning* ; if not, the access control- and charging model terminates the software and contents with an error message and thus prevents their unauthorized usage by the end user . [Specification at page 7 line 16 to page 8 line 14; emphasis added.]

e. **Disputed Factual Assertion - Clark Does Not Teach or Suggest
“...a usage processing server...operated by a network
provider...” As Recited in Claim 5**

The applicant respectfully submits that the citations to Clark relied upon by the examiner in rejecting claim 5 do not teach or suggest “...a usage processing server...operated by a network provider,” as recited in claim 5.

i. **Clark’s Software Vendor Is Not a “Network Provider”
As Recited in Claim 5**

Clark’s Software Vendor 3 is not “...a network provider...” as recited in claim 5. Clark discloses in paragraph 305 that the functions of Software Vendor 3 are:

The method begins with a Software Vendor 3 who is in *possession of Original Software 9* that the Software Vendor 3 wishes to sell to a Software User 2. The Original Software 9 is in fully compiled, executable form. The Software Vendor 3 *causes the Software Profiler 10 to operate on the Original Software 9*. The Software Profiler 10 acts to *remove certain selected executable instructions* from the Original Software 9, *creating the Software Vendor’s 3 copy of the Modified Software 7*. The Software Vendor 3 then *transfers, or communicates 13, the removed executable instructions from the Original Software 9 to the License Server 4*....The Software Vendor 3 then *sells and communicates 15* (by any transfer means, including without limitation on disk, by internet download, on CD-ROM, or otherwise) the *Modified Software 7 to the Software User 2*. The Software Vendor 3 also *communicates 16* (again, by any transfer means) to the Software User 2 the *User Key 5* (User Key 5 is a single one of the Keys 11) and the Trap Software 6. [Paragraph 305; emphasis added.]

Clark does not disclose that Software Vendor 3 is a network provider providing, for example, internet access to end users. Therefore, one of ordinary skill in the art would recognize that Clark’s “Software Vendor 3” is not a “network provider” as recited in claim 5.

ii.

iii.

Clark's License Server Is Not a "Network Provider" As Recited in Claim 5

Clark's Software Vendor 3 is not "...a network provider..." as recited in claim 5. Clark discloses in paragraph 305 that the function of License Server 4 is:

After installation of the three objects on the Software User's 2 computer, communication 17 between the Software User 2 and the License Server 4 permits the License Server 4 to *execute the removed executable instructions* from the Original Software 9 and permits the Modified Software 7 to run/execute as expected by the Software User 2... [Paragraph 305; emphasis added.]

Clark does not disclose that License Server 4 is a network provider providing internet access to end users. Therefore, one of ordinary skill in the art would recognize that Clark's "License Server 4" is not a "network provider" as recited in claim 5.

iii. Conclusion: Claim 5 Is Not Anticipated By Clark

Claim 5 recites "a usage processing server...operated by a network provider." For the reasons given above, Clark does not disclose or suggest "a usage processing server...operated by a network provider." Therefore, Clark does not teach or suggest the subject matter of claim 5. Therefore, claim 5 patentably defines over Clark. Therefore, the rejection of claim 5 under 35 USC 102(e) is improper and should be reversed.

f. Disputed Factual Assertion - Clark's System Does Not Disclose or Suggest "...usage processing data required to perform usage processing..." As Recited in Claim 5

Clark's system is directed to the prevention of the reverse engineering of software in contrast to "usage processing," as recited in claim 5 and disclosed in the specification of this application. The claimed "usage processing" comprises, for example, processing accounting information and user profiles. Clark's system is limited to the prevention of un-authorized execution of portions of a software program on a user's system. Clark does not disclose or suggest the "usage processing" of accounting information, for example, related to the user's use of a particular program.

i. **Clark's System Discloses Preventing Unauthorized Access To Portions of Original Software; It Does Not Disclose or Suggest "...a usage processing server...operated by a network provider..." As Recited in Claim 5**

In contrast to the applicant's system, the system taught by Clark is limited to preventing the unauthorized execution of *portions* of programs in order to prevent reverse-engineering the program code, as disclosed by Clark at paragraph 0310, which states that:

[0310] The instant invention implements a method for *converting static computer programs* (Original Software 9) *into a dynamic medium that is highly resistant to reverse engineering* and provides a static component (Modified Software 7) that executes locally at high speed. In essence the instant invention uses an electronic network (communication 17 between the License Server 4 and the Software User's 2 computer) to create a barrier between the Software User 2 and the Original Software 9. The Original Software 9 is modified (creating a Modified Software 7) in such fashion that *portions of the executable image are placed on a remote License Server 4*. When the Modified Software 7 needs to execute a missing portion of the executable image of the Original Software 9, the Modified Software 7 (in conjunction with the Trap Software 6) contacts the License Server 4 with a set of inputs, and the *License Server 4 then executes the missing portion(s) of the Original Software 9* and returns the result of the execution to the Software User 2 for continued local execution of the Modified Software 7. License Server 4 access is granted to only to licensed Software Users 2. Though the Modified Software 7 may be copied freely it will not execute properly without an authorized license (User Key 5) authenticated by the License Server 4. [Paragraph 0310; emphasis added.]

Clearly, one of ordinary skill in the art would recognize that Clark's system, as disclosed, is not designed to transmit "usage data" as defined by claim 5. The data transmitted by the Clark system is only "User Key 5," which only controls access to "Modified Software 7." Clark's

“User Key 5” cannot function as the claimed “usage data” because Clark’s does not contain data useful to determining, for example, the identity or financial status of the user, such as a user identification character, password, or account number. The Clark’s “User Key 5” can *only* function to control secure access to portions of software and cannot be used for the purpose, for example, of charging the end user for *each use* of software. This is because once the end user has possession of “User Key 5,” Clark’s License Server 4 will allow the end user to execute the software as many times as the end user wishes. Therefore Clark does not disclose or suggest “usage data,” as recited by claim 5. Likewise, Clark does not teach or suggest “...a usage processing server...,” as recited by claim 5.

ii. **Clark Discloses That It’s System Requires Removal of Instructions From the Application Software and Their Execution on a Remote Server; It Does Not Disclose or Suggest “...a usage processing server...operated by a network provider...” As Recited in Claim 5**

Clark states in paragraph 0305 that:

The Software Vendor 3 causes the Software Profiler 10 to operate on the Original Software 9. The Software Profiler 10 acts to remove certain selected executable instructions from the Original Software 9, creating the Software Vendor’s 3 copy of the Modified Software 7.

Clark removes instructions from the Original Software 9 to create Modified Software 7.

Clark states in paragraph 0305 that:

The Software Vendor 3 then transfers, or communicates 13, the removed executable instructions from the Original Software 9 to the License Server 4. The License Server 4 then creates a series of Keys 11 and communicates 14 the Keys 11 to the Software Vendor 3. The Software Vendor 3 then sells and communicates 15 (by any transfer means, including without limitation on disk, by internet download, on CD-ROM, or otherwise) the Modified Software 7 to the Software

User 2. The Software Vendor 3 also communicates 16 (again, by any transfer means) to the Software User 2 the User Key 5 (User Key 5 is a single one of the Keys 11) and the Trap Software 6. All three objects, the Modified Software 7, the User Key 5 and the Trap Software 6 must be installed on the Software User's 2 computer for the method of the instant invention to work. After installation of the three objects on the Software User's 2 computer, communication 17 between the Software User 2 and the *License Server 4 permits the License Server 4 to execute the removed executable instructions* from the Original Software 9 and permits the Modified Software 7 to run/execute as expected by the Software User 2, provided that such communication 17 is over a link networking the License Server 4 and the Software User's 2 computer.

Therefore, Clark's system requires that "selected executable instructions" be executed remotely from "Software User's 2 computer." Because executable instructions selected from Original Software 9 are executed on License Server 4, Clark's License Server 4 and Software User's 2 computer must have the same hardware architecture (e.g., the same type of processor).

iii. Clark's System Results in Software Execution Performance Degradation; This Discourages Users From Renting Software Using Clark's System

Clark's system results in software execution performance degradation because the software will require significantly more time to execute. The longer execution times in Clark's system are the result of: (1) the execution of extra "Trap Software 6" on Software User's 2 computer; (2) the communication time required for communicating between Software User's 2 computer and License Server 4 over a network; and (3) the execution of control software on License Server 4. Because Clark's system results in software performance degradation, users are unlikely to use Clark's system to rent software. This is because the most popular rental software is gaming software, which requires extremely high software performance in order to achieve realism, for example.

iv.

v.

Clark's System Requires That a Key Be Installed On User's Computer; This Compromises Security

Clark states in paragraph 0305 that:

The License Server 4 then creates a series of Keys 11 and communicates 14 the Keys 11 to the Software Vendor 3... The Software Vendor 3 also communicates 16 (again, by any transfer means) to the Software User 2 the User Key 5 (User Key 5 is a single one of the Keys 11) and the Trap Software 6. All three objects, the Modified Software 7, the User Key 5 and the Trap Software 6 must be installed on the Software User's 2 computer for the method of the instant invention to work.

In contrast to the invention defined by claim 5, Clark requires that User Key 5 be installed on Software User's 2 computer. In Clark's system, User Key 5 is created by License Server 4. Because User Key 5 is created by License Server 4, User Key 5 cannot contain "usage data," such as, for example, a "cryptographic identification character (a one-to-one corresponding identification number or valid charging model) of the software and contents, user data (a user identification character, password, or account number," which may be used to control access to complete software programs and to charge the user for use of software. Further, because the user has explicit possession of the key, Clark's User Key 5 can be passed to another party or can be stolen, creating a security breach, thereby rendering Clark's system ineffective for "usage processing" as recited in claim 5.

The "usage data" recited in claim 5 is completely different from Clark's "User Key." Support for "usage data," as recited in claim 5, can be found for example, in the specification of this application at 9 lines 5-30, which states:

The CIDAA request generator of the CIDAA module places a request via the network of the network operator for purposes of controlling the access and charging with respect to the CIDAA request handler on the corresponding server of the network operator. A cryptographic identification character that is specific for the respective software and content is thereby transferred in the direction of

the network operator in the form of a what is referred to as MD5 digest, as well as an *identification character and password of the end user*. Prior to this, the CIDAA module requests the end user to input the identification character and password. *MD5 is a special type of the general class of "hash functions"*, which are used in order to *biuniquely reduce digital signatures of digital data to "message digests"* for purposes of improved handling.

The "CIDAA decision maker" takes different criteria into consideration in order to decide whether to allow the inquiry of the end user to use the software and contents.

Possible criteria are:

- a) the correct cryptographic identification character of the software and contents, registered at the network operator ;
- b) the correct authorization of the end user via user identification character and password;
- c) the version number of the software and contents (to determine if the version is potentially out of date);
- d) the type of the software and contents to be used with respect to a *preset profile of the end user* (e.g., restriction with respect to specific contents for accounts of under age persons, etc .); and
- e) the *creditworthiness and account balance of the end user*. [Specification at page 9 lines 5-30; emphasis added.]

Because Clark's system requires a User Key to be installed Software User's 2 computer, Clark teaches away from the system defined by claim 5. Therefore, claim 5 patentably defines over Clark. Therefore, the rejection of claim 5 under 35 USC 102(e) is improper and should be reversed.

g. Conclusion: Clark Does Not Teach or Suggest the Subject Matter of Claim 5

Because Clark's system introduces significant delays in program execution and requires

that both License Server and Software User's computer have the same hardware architecture, Clark's system does not suggest or disclose, and actually *teaches away* from, a "...a usage processing server...operated by a network provider..." as recited in claim 5. Therefore, Clark does not teach or suggest the subject matter of claim 5. Therefore, claim 5 patentably defines over Clark. Therefore, the rejection of claim 5 under 35 USC 102(e) as being anticipated by Clark is improper and should be reversed.

2. The Rejections Under 102(e) of Independent Claim 14 - Group 1

a. The Examiner's Argument

The examiner's arguments in rejecting claim 14 are substantially the same as for claim 5 above.

b. The Citations to Clark Relied Upon By the Examiner

The citations to Clark relied upon by the examiner in rejecting claims 14 are included in the citations to Clark used in rejecting claim 5 above.

c. The Applicant's Traversal of the Rejections

In reply, the applicant respectfully traverses these rejections for the same reasons noted above for claim 5 because they are not supported by either substantial evidence or proper legal conclusions. Claim 5 recites a "usage processing server...operated by a network provider." Claim 14 recites "a usage processing server...operated by a network provider." For the reasons just stated, Clark does not disclose or suggest "...a usage processing server...operated by a network provider...". Therefore, claim 14 is patentably distinguishable over Clark for at least the reasons given above for claim 5. Therefore, the rejections of claim 14 is improper and should be reversed.

3. The Rejections Under 103(a) of Dependent Claims 6-8 - Group 1

a. The Citations Relied Upon By the Examiner

The citations to Clark relied upon by the examiner in rejecting claims 6-8 are included in the citations to Clark used in rejecting claim 5 above.

b. Claims 6-8 - Dependency On Allowable Claims

In reply, the applicant respectfully traverses these rejections because they are not supported by either substantial evidence or proper legal conclusions. The rejected claims depend

directly from claim 5. Therefore, the rejected claims are patentably distinguishable over Clark for at least the reasons given above for claims 5 and 14. Therefore, the rejections of claims 6-8 are improper and should be reversed.

4. The Rejection Under 103(a) of Dependent Claim 9 - Group 4

a. The Citations Relied Upon By the Examiner

The citations to Clark relied upon by the examiner in rejecting claim 9 are included in the citations to Clark used in rejecting claim 1 above.

b. Claim 9 - Dependency On An Allowable Claim

In reply, the applicant respectfully traverses this rejection because it is not supported by either substantial evidence or proper legal conclusions. The rejected claim depends directly from claim 5. Therefore, the rejected claim is patentably distinguishable over Clark for at least the reasons given above for claims 1, 5, 11, and 14.

c. Claim 9 - Clark Does Not Teach or Suggest "...performing a usage charging of said software product on user accounts and provider accounts..."

Claim 9 recites "...performing a usage charging of said software product on user accounts and provider accounts...." The citation to Ahmad relied upon by the examiner in rejecting claim 9 does not disclose or suggest "...performing a usage charging of said software product on user accounts and provider accounts...." Therefore, claim 9 is patentably distinguishable over Clark and Ahmed. Therefore, the rejection of claim 9 is improper and should be reversed.

5. The Rejection Under 103(a) of Dependent Claim 10 - Group 5

a. The Citations Relied Upon By the Examiner

The citations to Clark relied upon by the examiner in rejecting claim 10 are included in the citations to Clark used in rejecting claim 1 above.

b. Claim 10 - Dependency On An Allowable Claim

In reply, the applicant respectfully traverses this rejection because it is not supported by either substantial evidence or proper legal conclusions. The rejected claim depends directly from claim 5. Therefore, the rejected claim is patentably distinguishable over Clark for at least the reasons given above for claims 1, 5, 11, and 14.

c. **Claim 10 - Clark Does Not Teach or Suggest a "...usage processing module keeps statistics about usage contacts that have taken place and about results of a processing of said usage contacts..."**

Claim 10 recites a "...usage processing module keeps statistics about usage contacts that have taken place and about results of a processing of said usage contacts...." The citation to Ahmad relied upon by the examiner in rejecting claim 10 does not disclose or suggest a "...usage processing module keeps statistics about usage contacts that have taken place and about results of a processing of said usage contacts...." Therefore, claim 10 is patentably distinguishable over Clark and Ahmed. Therefore, the rejection of claim 10 is improper and should be reversed.

6. The Rejection Under 35 USC 101 of Claim 11 - Group 9

a. **The Examiner's Argument**

In support of the rejection of claim 1 under 35 USC 101 as being directed to non-statutory subject matter, the examiner states that:

3. Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete and tangible result.

For a claimed to be statutory, the claimed invention must be within the technological arts.

Mere ideas in the abstract (i.e., abstract idea law of nature, natural phenomena) that do not apply,

involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" and therefore are found to be non-statutory subject matter. For a method claim to pass the muster, the recited method must somehow apply, involve, use, or advance the technological arts

In the present case the inventive concept in claim 11 is directed to software

product. It, However, fails to clearly disclose what type of software product being claimed and fail to produce a useful concrete and tangible result. Therefore deemed to be directed to non-statutory subject matter. [Office action mailed 3/24/2004 at page 2 item 3.]

b. The Recitation of Claim 11

11. A software product, comprising:

a software component that is activated when called by said software product and that subsequently starts communicating with *a usage process server* and delivers usage processing data required for performing usage processing to said usage processing server in the framework of said communication, wherein said usage processing server is operated by a network provider;

wherein said *software product can be downloaded into a terminal device by a user via a network* in response to an inquiry from said user. [Emphasis added.]

c. Claim 11 Recites Subject Matter Within the Technological Arts

Claim 11 recites "...a usage process server...wherein said software product can be downloaded into a terminal device by a user via a network" The applicant respectfully submits that because claim 11 recites "...a usage process server...wherein said software product can be downloaded into a terminal device by a user via a network ..," the subject matter of claim 11 is within the technological arts and satisfies the requirements of 37 CFR 101. A "usage process server," a "terminal device" and "a network," recited in claim 11, are clearly concrete, technological components that are not "ideas in the abstract." Claim 11, therefore, defines a concrete, tangible apparatus that implements the claimed method to achieve a useful, concrete, and tangible result. Therefore, claim 11 is directed to statutory subject matter and satisfies the requirements of 37 CFR 101. Therefore, the applicant respectfully submits that the rejection of claim 11 under 35 USC 101 is improper and should be reversed.

7. The Rejection Under 103(a) of Claim 11 - Group 9

Claim 11 defines the same limitations as claim 5, which, as discussed above, are not disclosed or suggested by Clark. Therefore, the applicant respectfully submits that claim 11 patentably defines over Clark for at least the reasons given above for claim 5. Therefore, the applicant respectfully submits that the rejection of claim 11 under 35 USC 102(e) over Clark is improper and should be reversed.

8. The Rejections Under 103(a) of Dependent Claims 12 and 13 - Group 6

a. The Citations Relied Upon By the Examiner

The citations to Clark relied upon by the examiner in rejecting claims 12 and 13 are included in the citations to Clark used in rejecting claim 1 above.

b. Claims 12 and 13 - Dependency On An Allowable Claim

In reply, the applicant respectfully traverses this rejection because it is not supported by either substantial evidence or proper legal conclusions. The rejected claims depend directly or indirectly from claim 11. Therefore, the rejected claims are patentably distinguishable over Clark for at least the reasons given above for claims 1, 5, 11, and 14.

c. Claims 12 and 13 - Clark Does Not Teach or Suggest "...dynamically determined user data..."

Claims 12 and 13 recite "...dynamically determined user data...." The citation to Ahmad relied upon by the examiner in rejecting claims 12 and 13 does not disclose or suggest a "...dynamically determined user data...." Therefore, claims 12 and 13 are patentably distinguishable over Clark and Ahmed. Therefore, the rejections of claims 12 and 13 are improper and should be reversed.

9. The Rejections Under 35 USC 103(a) of Claim 1 - Group 8

a. The Recitation of Claim 1

1. A method for using software products that are offered via a network, comprising:
inquiring about a software product from an offer server by a user via a terminal device;

downloading said software product from said offer server via said network onto said terminal device in response to said inquiring by said user;

activating a software component of said software product;

starting a communication by way of said software component with a usage processing server regarding a usage of said software product in response to a call of said software product in said terminal device of said user, wherein said usage processing server is operated by a network provider;

providing, by said software component in a framework of said communication, data to said usage processing server; and

checking said data, by said usage processing server, and then making a determination selected from a group consisting of: whether usage of said software product is approved with respect to said inquiring user, and whether charging operations are carried out on user accounts and provider of software product accounts.

b. The Citations Relied Upon By the Examiner

In rejecting claims 1, 3, 4, and 15, the examiner relies on the same passages from Clark cited in the rejections of claims 5-14. In rejecting claims 1, 3, 4, and 15, the examiner in the office action mailed March 24, 2004, at pages 6-7 item 17, also relies on the following passage from Ahmad at column 9 line 15 to column 12 line 10, which states that:

FIG. 3 is a simplified block diagram illustrating the downloading of software program modules embodying an exemplary embodiment of the present invention from a remote server to a user's computer 20 via the Internet 60. Generally, as illustrated in FIG. 3, program modules available for rental are registered with a central registration site, such as a Software Registry 95. In the exemplary embodiment illustrated in FIG. 3, the Software Registry 95 is maintained on the program module rental server 88a. It should be understood that the Software Registry 95 may be maintained at a different location or remote server separate from the program module rental server 88a. It should also be understood that a variety of software program module owners or developers may register their

program modules on the Software Registry 95 for rental to prospective users by the rental service provider. It should further be understood that any number of rental service providers may be authorized to rent a particular software program module which is registered with the Software Registry 95. Preferably, each rental service provider will rent that particular program module from their respective Internet servers.

After the rental form is completed by the user, the rental service provider issues from the rental server 80a an instance of a Check-in/Check-out (CICO) module 120 corresponding to the particular program module 100 requested by the user. As is discussed in detail below, the CICO module 120 contains required licensing information for the program module requested by the user.

The program module 100 and the corresponding CICO module 120 are downloaded from the server 80a (in no particular order) to the user's computer 20 over the Internet 60, illustrated in FIG. 3, in a manner well known to those skilled in the art. Both modules are typically stored on the user's hard disk drive, or some other form of non-volatile memory storage device. As is well known to those skilled in the art, one or both of the modules (program module 100 and CICO module 120) can be compressed to expedite the downloading process. That is, the program module 100 may, if desired, be appended to the CICO module 120 to form one module. That one module may be downloaded to the user's computer 20, as described above.

Once the program module 100 and the CICO module 120 are downloaded onto the user's computer 20, the CICO module 120 provides the licensing information to a Software Monitor module 140 that is resident on the user's computer 20. In the case of a single module combining the CICO module 120 and the program module 100, the CICO module 120 will run first to provide the required licensing

information to the Software Monitor module 140. As is discussed in detail below, the Software Monitor module is a software application that monitors and ensures that use of the rented program module 100 by the user is in accordance with the licensing information provided by the CICO module 120. The operation and interaction of the processes and software program modules embodying the present invention discussed above will now be discussed in detail.

Referring now to FIGS. 2 and 3, as discussed above, before a particular program module 100 may be rented, that program module 100 must be registered on a Software Registry 95, which is a central registration site which may be maintained on the rental service provider's server 88a or separately from the rental service provider's server 88a. In response to registration on the Software Registry, the Software Registry assigns the program module 100 a unique identification number (APPID). For example, Microsoft "Word," version 8.0, would receive an APPID. If the program module 100 already has an assigned APPID, the Software Registry 95 will register this pre-assigned APPID, which is typically provided by the manufacturer of the program module 100. For example, the APPID can be a "Global Unique Identifier code" (GUID) assigned to selected program module titles by software manufacturers.

The CICO module 120 is a software program module responsible for providing licensing information for the rented program module 100 to the Software Monitor module 140 (discussed below) resident on the user's computer 20. The licensing information contained by the CICO module 120 includes the APPID and the licensed period of time over which the program module 100 may be used. The CICO module 120 is a tool that will encode this information on the user's computer 20 so that the Software Monitor module 140 can be made aware of the user's permission to use the program module 100, as well as the time period over which use of the program module 100 is allowed. It should be understood that a

CICO module 120 is downloaded each time a program module is rented or renewed.

The CICO module 120 must be run on the user's computer 20 prior to running the rented program module 100 on the user's computer 20. In the preferred embodiment, the CICO module 120 is downloaded from the rental server 88a via the Internet, as described above. The CICO module 120 is preferably implemented as a dynamic-link library module (DLL) or as an Active X/OLE module (OCX). These types of modules are well known to those skilled in the art as modules that serve a specific function or set of functions which may be launched only when needed by a program that calls them. Preferably, the CICO module 120 is launched upon being downloaded to the user's computer 20. The mechanism for downloading and launching the CICO module 120 from the Internet is well known to those skilled in the art.

Because the CICO module 120 is a software application itself, it must be made secure from unauthorized copying or tampering before it can assist in securing the rented program module. Each CICO module has a CICO module identification number (CID). The CID preferably has two parts separated by a "-". As is discussed in detail below, the first part of the CID is a unique identification number generated and encoded into the CICO module by the Software Monitor module 140, and the second part is the identification number unique to the user's computer 20. The Software Monitor module 140 verifies the CICO module 120 has not been used before and then issues a randomly generated unique CID to the CICO module 120. After the CICO module 120 provides the Software Monitor module 140 with the licensing information for the rented program module 100, the CICO module 120 is deleted by the Software Monitor module 140 to prevent any unauthorized copying of the CICO module 120.

Upon downloading the program module 100 and the CICO module 120 onto the user's computer 20, the program module 100 will load the Software Monitor module 140 (SM) for operation. As should be understood from the foregoing discussion, the SM 140 is a software program module or module that verifies the user's license to use the rented program module and tracks use of the rented program module by the user. Referring to FIG. 3, the SM 140 may be downloaded from the rental server 80a to the user's computer 20 at the time the program module 100 and the CICO module 120 are downloaded. Alternatively, the SM 140 may be resident on the user's computer 20 as part of software provided to the user on the computer's hard disk drive.

The SM 140 must run constantly on the user's computer 20 during use of the rented program module 100 to prevent unauthorized use of the rented program module 100. As with the CICO module 120, the SM 140 may be implemented as either a system DLL or an ActiveX control module. Once the CICO module 120 has been downloaded and secured by the SM 140, as discussed above, the CICO module 120 transfers to the SM 140 the license information for the rented program module. The data is transferred as bytes to the SM 140 in a manner well known to those skilled in the art. The SM 140 is responsible for interpreting and using the information. The task of the CICO module 120 is completed as soon as the information is transferred.

The SM 140 tracks the time of use of the program module 100 without the use of the computer's system clock because the computer's system clock may be easily changed by the user. The SM 140 utilizes an internal timer to track the actual elapsed time of use of the program module 100. The standard approach to calculating the time of use is to subtract the start time, i.e., the time the program module 100 is launched from the end time, i.e., the time the program module 100 is exited.

To further prevent the user from manipulating the system, the SM 140 may hook into the system clock of the computer 20 via the operating system, which offers system time and system date, to be notified each time the system clock is changed. Consequently, all changes to the system clock will be recorded and accounted for by the SM 140.

Alternatively, the SM 140 may track the number of uses of the program module 100 if the program module is rented for a specified licensed number of uses. The SM 140 may track the number of uses of the program module 100 by setting an internal counter, similar to the above-described internal timer, when the program module 100 is first used. Upon each subsequent licensed use, the counter will add one count. The SM 140 will compare the total count to the licensed number of uses each time the user attempts to launch the program module 100. After the licensed number of uses is expended the SM 140 will prevent subsequent operation of the program module 100.

For subsequent use of the program module 100, the SM 140 can remember that it deleted the CICO module 120 during the first use of the program module 100, and the SM 140 will not check for the CICO module 120 on the second (and future uses) of the program module 100 while time remains for use of the program module 100. For subsequent rental of the program module 100, there is no need to download the program module 100 again. However, there is a need to download the CICO module 120 again from the rental service provider's server each time the program module 100 is subsequently rented.

Unauthorized copying of the program module 100 is prevented by rendering the program module useless without the simultaneous operation of the Software Monitor 140. Because the program module 100 will not run without the

simultaneous running of the SM 140, any unauthorized copy of the program module 100 launched on a different computer will be rendered useless because the SM 140 will recognize that the computer identifier for the different computer does not match the computer identifier stored as a part of the unique CID, described above. Accordingly, the SM 140 will not allow the unauthorized copy of the program module 100 to run. [Ahmad at column 9 line 15 to column 12 line 10.]

c. **Ahmad Does Not Teach or Suggest "...a usage processing server...operated by a network provider..." As Recited By Claim 1**

In reply, the applicant respectfully submits that Ahmad does not teach or suggest "...a usage processing server...operated by a network provider..." as recited by claim 1.

i. **Ahmad's "Web Server" Is Not the Claimed "Network Provider" As Recited By Claim 1**

Ahmad discloses at column 8 lines 1-38 that:

...The Internet 60 includes a plurality of backbone networks 65a through 65n. These backbone networks form an international grid of high-speed, high-capacity data communication lines interconnecting a number of massive computers that serve as large-scale processing points or nodes. The backbone networks 65 are interconnected with each other through a plurality of network access points 70a through 70n. These network access points are interfaces through which information is communicated from one backbone network to another....

The Internet 60 includes a plurality of *Internet sites* 75a through 75n. These Internet sites are generally *operated by corporations, universities, and governmental organizations*. Each Internet site may include one or more repositories of information and resources that may be accessed over the Internet. Each Internet site, as represented by the Internet site 75a, may include a plurality of *web servers* 80a through 80n. Each of these web servers may provide "home pages" to be visited, files to be read or downloaded, *applications to be shared*, and

the like. [Ahmad at column 8 lines 1-38; emphasis added.]

The Internet 60 also includes a plurality of *points of presence* 85a through 85n that are *operated by local access providers*. These local access providers are in the business of *providing Internet access to end user stations*. In the preferred embodiment of the present invention, the personal computer 20, shown in FIG. 1, is an end-user station. As shown in FIG. 2, the point of presence 85a provides Internet access to the personal computer 20 (end user station) and other end user stations 88a through 88n, the point of presence 85b provides Internet access to end user stations 88a' through 88n', etc. All together, the points of presence 85 can provide Internet access to numerous end-user stations 88. Each point of presence 85, and each end user 88, may, but need not, provide home pages for access by others on the Internet 60. [Ahmad at column 8 lines 1-38; emphasis added.]

In fact, Ahmad's Internet sites and web servers are designed to provide "repositories of information" and to be "operated by corporations, universities, and governmental organizations." Thus, clearly Ahmad's "Internet sites" and "web servers" are not designed to provide network connectivity for the end user.

ii. **Ahmad Discloses "Applications to be Shared" and a "Rental Service Provider" Residing on His "Web Server," Not "...a usage processing server...operated by a network provider..." As Recited By Claim 1**

It is clear that the only components in Ahmad's system designed to provide shared applications, that is, applications that may be downloaded from the Internet, are Ahmad's Internet sites and web servers:

Each Internet site, as represented by the Internet site 75a, may include a plurality of *web servers* 80a through 80n. Each of these web servers may provide "home pages" to be visited, files to be read or downloaded, *applications to be shared*, and the like. [Ahmad at column 8 lines 1-38; emphasis added.]

It is also clear that the only components in Ahmad's system designed to provide a "rental service" are Ahmad's Internet sites and web servers:

Referring now to FIG. 2, a user desiring to rent a particular program module, logs onto the Internet, as discussed above, and accesses the *Internet site 75a of the software rental service provider*. The user then locates the *rental server 80a at the Internet site 75a*. The user completes a rental form provided on the server 80a and requests use of a particular program for a specified period of time. It should be understood that the form can also require payment information, such as a credit card number or an account number if the user has an established account with the rental service provider. [Ahmad at column 8 lines 54-64; emphasis added.]

Therefore, the only component of Ahmad's system that could possibly have been recognized by one of ordinary skill in the art as the claimed "usage processing server" would have been Ahmad's "web servers" operated by Ahmad's "Internet sites." No other component in Ahmad's disclosed system has the capability to function as the claimed "usage processing server." Most importantly, Ahmad does *not* disclose that his "points of presence 85a through 85n" provide "applications to be shared" or a "rental service provider."

iii. **Only Ahmad's "Points of Presence" May Function As the Claimed "Network Provider," But Does Not Disclose That His "Points of Presence" Provide "Applications to be Shared" or a "Rental Service Provider"**

In Ahmad's system, the only component which would have been recognized by one of ordinary skill in the art as being the claimed "network provider" would have been Ahmad's points of presence. However, Ahmad states that:

The Internet 60 also includes a plurality of *points of presence 85a through 85n* that are *operated by local access providers*. These local access providers are in the business of *providing Internet access to end user stations*. [Ahmad at column 8 lines 24-28; emphasis added.]

Thus, Ahmad clearly distinguishes the functionality of his “points of presence 85a through 85n” from his “Internet sites 75a through 75n” and his “web servers 80a through 80n” because Ahmad discloses that only Ahmad’s “point of presence” provide Internet access to “end user stations.” In contrast, as noted above, Ahmad’s Internet sites and web servers are designed to provide “repositories of information” and to be “operated by corporations, universities, and governmental organizations.”

iv. **Ahmad Does Not Disclose That His “Points of Presence” Provide “Applications to be Shared” or a “Rental Service Provider”**

As noted above, Ahmad only discloses that web servers 80a-80n provide “applications to be shared” and a “rental service provider.” Ahmad does *not* disclose that his “points of presence 85a through 85n” provide either “applications to be shared” or a “rental service provider.”

Therefore, there is no teaching in Ahmad that suggests "...a usage processing server...operated by a network provider..." recited by claim 1 and defined in this application. Therefore, Ahmad in combination with Clark does not teach or suggest the subject matter of claim 1. Therefore, the rejection of claim 1 under 35 USC 103(a) over Clark in view of Ahmad is improper and should be reversed.

d. **No Motivation to Combine References**

i. **Ahmad’s System Is Designed to Control Complete Programs**

Ahmad discloses a system directed to controlling the use of complete programs, stating that:

The present invention is directed to a method and system for monitoring the use of a rented software program module by a rental service provider of that software program module. As will be understood, the present invention may be used for monitoring a variety of program modules, such as *application programs*, operating system modules, Internet browsers, etc. In an exemplary embodiment of the present invention, an *application program*, such as "WORD," version 8.0,

produced by Microsoft Corporation of Redmond, Wash., may be rented by an end user for use during some specified period of time. The present invention allows a rental service provider to track the use of the rented software program module to prevent unauthorized extension of a licensed period of use and to prevent unauthorized copying of the rented software program module. [Ahmad at column 5 lines 16-30; emphasis added.]

ii. **Clarks's System Is Designed to Prevent Reverse Engineering of Software**

Clark teaches a system limited to preventing the unauthorized execution of *portions* of programs in order to prevent reverse-engineering the program code, as disclosed by Clark at paragraph 0310, which states that:

[0310] The instant invention implements a method for *converting static computer programs* (Original Software 9) *into a dynamic medium that is highly resistant to reverse engineering* and provides a static component (Modified Software 7) that executes locally at high speed. In essence the instant invention uses an electronic network (communication 17 between the License Server 4 and the Software User's 2 computer) to create a barrier between the Software User 2 and the Original Software 9. The Original Software 9 is modified (creating a Modified Software 7) in such fashion that *portions of the executable image are placed on a remote License Server 4*. When the Modified Software 7 needs to execute a missing portion of the executable image of the Original Software 9, the Modified Software 7 (in conjunction with the Trap Software 6) contacts the License Server 4 with a set of inputs, and the *License Server 4 then executes the missing portion(s) of the Original Software 9* and returns the result of the execution to the Software User 2 for continued local execution of the Modified Software 7. License Server 4 access is granted to only to licensed Software Users 2. Though the Modified Software 7 may be copied freely it will not execute properly without an authorized license (User Key 5) authenticated by the License Server 4. [Paragraph 0310; emphasis added.]

iii. **Ahmad's System Is Not Compatible With Clark's System**

Because Ahmad's system is disclosed as only operable with complete programs, such as "WORD," and Clark's system is not operable with complete programs, one of ordinary skill in the art at the time of the invention would have recognized that attempting to incorporate Ahmad's system into Clark's system would have inhibited the ability of a user of the combined system to execute *complete user programs* at normal execution speeds. This is because Clark's system requires the remote execution of portions of executable programs by Clark's License Server.

Therefore, one of ordinary skill in the art would *not* have been motivated to combine the teachings of Ahmad with the teachings of Clark. Because there is no teaching or suggestion to combine the teachings of Ahmad with the teachings of Clark, the examiner has not made a proper *prima facie* rejection. Therefore, the rejection of claim 1 under 35 USC 103(a) over Clark in view of Ahmad is improper and should be reversed.

10. The Rejection Under 103(a) of Dependent Claim 3 - Group 2

a. The Citations Relied Upon By the Examiner

The citations to Clark relied upon by the examiner in rejecting claim 3 are included in the citations to Clark used in rejecting claim 1 above.

b. Claim 3 - Dependency On An Allowable Claim

In reply, the applicant respectfully traverses this rejection because it is not supported by either substantial evidence or proper legal conclusions. The rejected claim depends directly from claim 1. Therefore, the rejected claim is patentably distinguishable over Clark for at least the reasons given above for claims 1, 5, 11, and 14. Therefore, the rejection of claim 3 is improper and should be reversed.

c. Claim 3 - Clark Does Not Teach or Suggest "...operating said offer server by a network provider..."

Claim 3 recites "...operating said offer server by a network provider...." The citation to

Ahmad relied upon by the examiner in rejecting claim 3 does not disclose or suggest "...operating said offer server by a network provider...." Therefore, claim 3 is patentably distinguishable over Clark and Ahmed. Therefore, the rejection of claim 3 is improper and should be reversed.

11. The Rejection Under 103(a) of Dependent Claim 4 - Group 3

a. The Citations Relied Upon By the Examiner

The citations to Clark relied upon by the examiner in rejecting claim 4 are included in the citations to Clark used in rejecting claim 1 above.

b. Claim 4 - Dependency On An Allowable Claim

In reply, the applicant respectfully traverses this rejection because it is not supported by either substantial evidence or proper legal conclusions. The rejected claim depends directly from claim 1. Therefore, the rejected claim is patentably distinguishable over Clark for at least the reasons given above for claims 1, 5, 11, and 14. Therefore, the rejection of claim 4 is improper and should be reversed.

c. Claim 4 - Clark Does Not Teach or Suggest "...a server selected from the group consisting of said offer server and said usage processing server..."

Claim 4 recites "...a server selected from the group consisting of said offer server and said usage processing server...." The citation to Ahmad relied upon by the examiner in rejecting claim 4 does not disclose or suggest "...a server selected from the group consisting of said offer server and said usage processing server...." Therefore, claim 4 is patentably distinguishable over Clark and Ahmed. Therefore, the rejection of claim 4 is improper and should be reversed.

12. The Rejection Under 103(a) of Independent Claim 15 - Group 7

a. The Citations Relied Upon By the Examiner

The citations to Clark and Ahmad relied upon by the examiner in rejecting claim 15 are included in the citations to Clark and Ahmad used in rejecting claim 1 above.

b. The Applicant's Traversal of the Rejection: No Motivation to Combine References

In reply, the applicant respectfully traverses this rejection because it is not supported by either substantial evidence or proper legal conclusions. One of ordinary skill in the art at the

time of the invention would not have been motivated to combine the teachings of Clark with the teachings of Ahmad for the reasons given above for claim 1. Therefore, the examiner has not made an proper *prima facie* rejection. Therefore, the rejection of claim 15 is improper and should be reversed.

IV. 37 CFR 1.192(d) - Non-compliant Brief

This brief is in compliance with 37 CFR 1.192(c). Accordingly, this subsection is inapplicable.

Respectfully Submitted,

6/24/2004
Date

Robert G. Crockett

Robert G. Crockett
Registration No. 42,448
Attorney of Record
Richard A. Neifeld, Ph.D.
Registration No. 35,299

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PATENT TRADEMARK OFFICE

V. **Appendix - Claims On Appeal**

1. A method for using software products that are offered via a network, comprising:
 - inquiring about a software product from an offer server by a user via a terminal device;
 - downloading said software product from said offer server via said network onto said terminal device in response to said inquiring by said user;
 - activating a software component of said software product;
 - starting a communication by way of said software component with a usage processing server regarding a usage of said software product in response to a call of said software product in said terminal device of said user, wherein said usage processing server is operated by a network provider;
 - providing, by said software component in a framework of said communication, data to said usage processing server; and
 - checking said data, by said usage processing server, and then making a determination selected from a group consisting of: whether usage of said software product is approved with respect to said inquiring user, and whether charging operations are carried out on user accounts and provider of software product accounts.
2. (Canceled)
3. The method of claim 1, further comprising operating said offer server by a network provider.
4. The method of claim 1, further comprising using a web server for a server selected from the group consisting of said offer server and said usage processing server.
5. A usage processing server comprising:
 - a usage processing module for processing a software product downloaded from a network;
 - wherein said usage processing server is operated by a network provider and wherein said usage processing server is contacted by said software product after said software product has been downloaded into a terminal device of a user and has been activated; and

wherein usage processing data required to perform usage processing are delivered to said usage processing server.

6. A usage processing server according to claim 5, further comprising:

a data store in which a software product identification of said software product and type of usage processing data that prescribe a type of usage processing of said software product are stored by said usage processing module, and

wherein said usage processing module registers said software product.

7. A usage processing server according to claim 5, wherein:

said usage processing data required comprises a software product identification of said software product and a user identification.

8. A usage processing server according to claim 5, wherein:

said usage processing comprising performing an access control.

9. A usage processing server according to claim 5, wherein:

said usage processing comprises performing a usage charging of said software product on user accounts and provider accounts.

10. A usage processing server according to claim 5, wherein:

said usage processing module keeps statistics about usage contacts that have taken place and about results of a processing of said usage contacts.

11. A software product, comprising:

a software component that is activated when called by said software product and that subsequently starts communicating with a usage process server and delivers usage processing data required for performing usage processing to said usage processing server in the framework of said communication, wherein said usage processing server is operated by a network provider;

wherein said software product can be downloaded into a terminal device by a user via a network in response to an inquiry from said user.

12. A software product according to claim 11, wherein said usage processing data comprises:

software product provider data;

software product identification; and

wherein said usage processing data is dynamically determined user data.

13. A software product according to claim 12, wherein said software component interacts with said user to produce said dynamically determined user data.

14. A method for the generation of a software product that is offered via a network, comprising:

installing a software component in source code of said software product of a software manufacturer by using a software development kit provided by a usage processing provider;

activating said software component when called by said software product;

starting a communication by said software component with a usage processing server after said activating said software component, wherein said usage processing server is operated by a network provider;

sending, by said software component, usage processing data that are required for performing usage processing to said usage processing server in the framework of said communication.

15. A method for using software products that are offered via a network, comprising:

inquiring about a software product from an offer server by a user via a terminal device;

downloading said software product from said offer server via said network onto said terminal device in response to said inquiring by said user;

activating a software component of said software product;

starting a communication by way of said software component with a usage processing server regarding a usage of said software product in response to a call of said software product in said terminal device of said user;

providing, by said software component in a framework of said communication, data to said usage processing server; and

checking said data, by said usage processing server, and then making a determination selected from a group consisting of: whether usage of said software product is approved with respect to said inquiring user, and whether charging operations are carried out on user accounts and provider of software product accounts.

RGC

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